

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: Mon May 21 13:16:15 EDT 2007

=====

Application No: 10578976 Version No: 1.0

Input Set:

Output Set:

Started: 2007-05-21 11:49:19.739

Finished: 2007-05-21 11:49:19.938

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 199 ms

Total Warnings: 0

Total Errors: 0

No. of SeqIDs Defined: 4

Actual SeqID Count: 4

# SEQUENCE LISTING

<110> Hsu, Li-Chung  
Karin, Michael

<120> Compositions and Methods for Reducing Microbial Induced Apoptosis

<130> UCSD-10860

<140> 10578976

<141> 2007-05-21

<150> 10/578,976

<151> 2006-05-10

<160> 4

<170> PatentIn version 3.3

<210> 1

<211> 551

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Gly Asp Leu Ser Ala Gly Phe Phe Met Glu Glu Leu Asn Thr  
1 5 10 15

Tyr Arg Gln Lys Gln Gly Val Val Leu Lys Tyr Gln Glu Leu Pro Asn  
20 25 30

Ser Gly Pro Pro His Asp Arg Arg Phe Thr Phe Gln Val Ile Ile Asp  
35 40 45

Gly Arg Glu Phe Pro Glu Gly Glu Gly Arg Ser Lys Lys Glu Ala Lys  
50 55 60

Asn Ala Ala Ala Lys Leu Ala Val Glu Ile Leu Asn Lys Glu Lys Lys  
65 70 75 80

Ala Val Ser Pro Leu Leu Leu Thr Thr Thr Asn Ser Ser Glu Gly Leu  
85 90 95

Ser Met Gly Asn Tyr Ile Gly Leu Ile Asn Arg Ile Ala Gln Lys Lys  
100 105 110

Arg Leu Thr Val Asn Tyr Glu Gln Cys Ala Ser Gly Val His Gly Pro  
115 120 125

Glu	Gly	Phe	His	Tyr	Lys	Cys	Lys	Met	Gly	Gln	Lys	Glu	Tyr	Ser	Ile	130	135	140	
Gly	Thr	Gly	Ser	Thr	Lys	Gln	Glu	Ala	Lys	Gln	Leu	Ala	Ala	Lys	Leu	145	150	155	160
Ala	Tyr	Leu	Gln	Ile	Leu	Ser	Glu	Glu	Thr	Ser	Val	Lys	Ser	Asp	Tyr	165	170	175	
Leu	Ser	Ser	Gly	Ser	Phe	Ala	Thr	Thr	Cys	Glu	Ser	Gln	Ser	Asn	Ser	180	185	190	
Leu	Val	Thr	Ser	Thr	Leu	Ala	Ser	Glu	Ser	Ser	Ser	Glu	Gly	Asp	Phe	195	200	205	
Ser	Ala	Asp	Thr	Ser	Glu	Ile	Asn	Ser	Asn	Ser	Asp	Ser	Leu	Asn	Ser	210	215	220	
Ser	Ser	Leu	Leu	Met	Asn	Gly	Leu	Arg	Asn	Asn	Gln	Arg	Lys	Ala	Lys	225	230	235	240
Arg	Ser	Leu	Ala	Pro	Arg	Phe	Asp	Leu	Pro	Asp	Met	Lys	Glu	Thr	Lys	245	250	255	
Tyr	Thr	Val	Asp	Lys	Arg	Phe	Gly	Met	Asp	Phe	Lys	Glu	Ile	Glu	Leu	260	265	270	
Ile	Gly	Ser	Gly	Gly	Phe	Gly	Gln	Val	Phe	Lys	Ala	Lys	His	Arg	Ile	275	280	285	
Asp	Gly	Lys	Thr	Tyr	Val	Ile	Lys	Arg	Val	Lys	Tyr	Asn	Asn	Glu	Lys	290	295	300	
Ala	Glu	Arg	Glu	Val	Lys	Ala	Leu	Ala	Lys	Leu	Asp	His	Val	Asn	Ile	305	310	315	320
Val	His	Tyr	Asn	Gly	Cys	Trp	Asp	Gly	Phe	Asp	Tyr	Asp	Pro	Glu	Thr	325	330	335	
Ser	Asp	Asp	Ser	Leu	Glu	Ser	Ser	Asp	Tyr	Asp	Pro	Glu	Asn	Ser	Lys	340	345	350	

Asn Ser Ser Arg Ser Lys Thr Lys Cys Leu Phe Ile Gln Met Glu Phe  
355 360 365

Cys Asp Lys Gly Thr Leu Glu Gln Trp Ile Glu Lys Arg Arg Gly Glu  
370 375 380

Lys Leu Asp Lys Val Leu Ala Leu Glu Leu Phe Glu Gln Ile Thr Lys  
385 390 395 400

Gly Val Asp Tyr Ile His Ser Lys Lys Leu Ile His Arg Asp Leu Lys  
405 410 415

Pro Ser Asn Ile Phe Leu Val Asp Thr Lys Gln Val Lys Ile Gly Asp  
420 425 430

Phe Gly Leu Val Thr Ser Leu Lys Asn Asp Gly Lys Arg Thr Arg Ser  
435 440 445

Lys Gly Thr Leu Arg Tyr Met Ser Pro Glu Gln Ile Ser Ser Gln Asp  
450 455 460

Tyr Gly Lys Glu Val Asp Leu Tyr Ala Leu Gly Leu Ile Leu Ala Glu  
465 470 475 480

Leu Leu His Val Cys Asp Thr Ala Phe Glu Thr Ser Lys Phe Phe Thr  
485 490 495

Asp Leu Arg Asp Gly Ile Ile Ser Asp Ile Phe Asp Lys Lys Glu Lys  
500 505 510

Thr Leu Leu Gln Lys Leu Leu Ser Lys Lys Pro Glu Asp Arg Pro Asn  
515 520 525

Thr Ser Glu Ile Leu Arg Thr Leu Thr Val Trp Lys Lys Ser Pro Glu  
530 535 540

Lys Asn Glu Arg His Thr Cys  
545 550

<210> 2  
<211> 2808  
<212> DNA  
<213> Homo sapiens

<400> 2

gcggcgcgcg	cggcgcagtt	tgctcatact	ttgtgacttg	cggtcacagt	ggcattcagc	60
tccacacttg	gtagaaccac	aggcacgaca	agcatagaaa	catcctaac	aatcttcac	120
gaggcatcga	ggtccatccc	aataaaaatc	aggagaccct	ggctatcata	gaccttagtc	180
ttcgctggta	tactcgctgt	ctgtcaacca	gcggttgact	ttttttaage	cttctttttt	240
ctcttttacc	agtttctgga	gcaaattcag	tttgccttcc	tggatttgta	aattgtaatg	300
acctcaaaac	tttagcagtt	cttccatctg	actcagggtt	gcttctctgg	cggtcttcag	360
aatcaacatc	cacacttccg	tgattatctg	cgtgcatttt	ggacaaagct	tccaaccagg	420
atacgggaag	aagaaatggc	tggtgatctt	tcagcagggt	tcttcatgga	ggaacttaat	480
acataccgtc	agaagcaggg	agtagtactt	aaatatcaag	aactgcctaa	ttcaggacct	540
ccacatgata	ggagggtttac	atttcaagtt	ataatagatg	gaagagaatt	tccagaaggt	600
gaaggtagat	caaagaagga	agcaaaaaat	gccgcagcca	aattagctgt	tgagatactt	660
aataaggaaa	agaaggcagt	tagtccttta	ttattgacaa	caacgaattc	ttcagaagga	720
ttatccatgg	ggaattacat	aggccttata	aatagaattg	cccagaagaa	aagactaact	780
gtaaattatg	aacagtgtgc	atcggggggtg	catgggccag	aaggatttca	ttataaatgc	840
aaaatgggac	agaaagaata	tagtattggg	acaggttcta	ctaaacagga	agcaaaacaa	900
ttggccgcta	aacttgcata	tcttcagata	ttatcagaag	aaacctcagt	gaaatctgac	960
tacctgtcct	ctggttcttt	tgctactacg	tgtgagtcct	aaagcaactc	tttagtgacc	1020
agcacactcg	cttctgaatc	atcatctgaa	ggtgacttct	cagcagatac	atcagagata	1080
aattctaaca	gtgacagttt	aaacagttct	tcgttgctta	tgaatggtct	cagaaataat	1140
caaaggaag	caaaaagatc	tttggcacc	agatttgacc	ttcttgacat	gaaagaaaca	1200
aagtatactg	tggaacaag	gtttggcatg	gattttaaag	aatagaatt	aattggtca	1260
ggtggatttg	gccaagtttt	caaagcaaaa	cacagaattg	acggaagac	ttacgttatt	1320
aaacgtgta	aatataataa	cgagaaggcg	gagcgtgaag	taaaagcatt	ggcaaaactt	1380
gatcatgtaa	atattgttca	ctacaatggc	tgttgggatg	gatttgatta	tgatcctgag	1440
accagtgatg	attctcttga	gagcagtgat	tatgatcctg	agaacagcaa	aatagttca	1500
aggtcaaaga	ctaagtgcct	tttcatccaa	atggaattct	gtgataaagg	gaccttgga	1560
caatggattg	aaaaaagaag	aggcgagaaa	ctagacaaag	ttttggcttt	ggaactcttt	1620
gaacaaataa	caaaaggggt	ggattatata	cattcaaaaa	aattaattca	tagagatctt	1680

aagccaagta atatatctctt agtagataca aaacaagtaa agattggaga ctttggactt 1740  
gtaacatctc tgaaaaatga tggaaagcga acaaggagta agggaacttt gcgatacatg 1800  
agcccagaac agatttcttc gcaagactat ggaaaggaag tggacctcta cgctttgggg 1860  
ctaattcttg ctgaacttct tcatgtatgt gacactgctt ttgaaacatc aaagtttttc 1920  
acagacctac gggatggcat catctcagat atatttgata aaaaagaaaa aactcttcta 1980  
cagaaattac tctcaaagaa acctgaggat cgacctaaac catctgaaat actaaggacc 2040  
ttgactgtgt ggaagaaaag cccagagaaa aatgaacgac acacatgtta gagcccttct 2100  
gaaaaagtat cctgcttctg atatgcagtt ttccttaaata tatctaaaat ctgctaggga 2160  
atatcaatag atatttacct tttattttaa tgtttccttt aattttttac tatttttact 2220  
aatctttctg cagaaacaga aagggttttct tctttttgct tcaaaaacat tcttacatct 2280  
tactttttcc tggctcatct ctttattctt tttttttttt ttaaagacag agtctcgctc 2340  
tgttgcccag gctggagtgc aatgacacag tcttggetca ctgcaacttc tgcctcttgg 2400  
gttcaagtga ttctctgcc tcagcctcct gagtagctgg attacaggca tgtgccaccc 2460  
acccaactaa tttttgtgtt ttttaataaag acagggtttc accatgttgg ccaggctggt 2520  
ctcaaactcc tgacctcaag taatccacct gcctcggcct cccaaagtgc tgggattaca 2580  
gggatgagcc accgcgccca gcctcatctc tttgttctaa agatggaaaa accaccccca 2640  
aattttcttt ttatactatt aatgaatcaa tcaattcata tctatttatt aaatttctac 2700  
cgcttttagg ccaaaaaaat gtaagatcgt tctctgcctc acatagctta caagccagct 2760  
ggagaaatat ggtactcatt aaaaaaaaaa aaaaagtgat gtacaacc 2808

<210> 3  
<211> 515  
<212> PRT  
<213> Mus musculus

<400> 3

Met Ala Ser Asp Thr Pro Gly Phe Tyr Met Asp Lys Leu Asn Lys Tyr  
1 5 10 15

Arg Gln Met His Gly Val Ala Ile Thr Tyr Lys Glu Leu Ser Thr Ser  
20 25 30

Gly Pro Pro His Asp Arg Arg Phe Thr Phe Gln Val Leu Ile Asp Glu  
35 40 45

Lys Glu Phe Pro Glu Ala Lys Gly Lys Ser Lys Gln Glu Ala Arg Asn  
 50 55 60

Ala Ala Ala Lys Leu Ala Val Asp Ile Leu Asp Asn Glu Asn Lys Val  
 65 70 75 80

Asp Cys His Thr Ser Ala Ser Glu Gln Gly Leu Pro Tyr Gly Asn Tyr  
 85 90 95

Ile Gly Leu Val Asn Ser Phe Ala Gln Lys Lys Lys Leu Ser Val Asn  
 100 105 110

Tyr Glu Gln Cys Glu Pro Asn Ser Glu Leu Pro Gln Arg Phe Ile Cys  
 115 120 125

Lys Cys Lys Ile Gly Gln Thr Met Tyr Gly Thr Gly Ser Gly Val Thr  
 130 135 140

Lys Gln Glu Ala Lys Gln Leu Ala Ala Lys Glu Ala Tyr Gln Lys Leu  
 145 150 155 160

Leu Lys Ser Pro Pro Lys Thr Ala Gly Thr Ser Ser Ser Val Val Thr  
 165 170 175

Ser Thr Phe Ser Gly Phe Ser Ser Ser Ser Ser Met Thr Ser Asn Gly  
 180 185 190

Val Ser Gln Ser Ala Pro Gly Ser Phe Ser Ser Glu Asn Val Phe Thr  
 195 200 205

Asn Gly Leu Gly Glu Asn Lys Arg Lys Ser Gly Val Lys Val Ser Pro  
 210 215 220

Asp Asp Val Gln Arg Asn Lys Tyr Thr Leu Asp Ala Arg Phe Asn Ser  
 225 230 235 240

Asp Phe Glu Asp Ile Glu Glu Ile Gly Leu Gly Gly Phe Gly Gln Val  
 245 250 255

Phe Lys Ala Lys His Arg Ile Asp Gly Lys Arg Tyr Ala Ile Lys Arg  
 260 265 270



Val Lys Tyr Asn Thr Glu Lys Ala Glu His Glu Val Gln Ala Leu Ala  
275 280 285

Glu Leu Asn His Val Asn Ile Val Gln Tyr His Ser Cys Trp Glu Gly  
290 295 300

Val Asp Tyr Asp Pro Glu His Ser Met Ser Asp Thr Ser Arg Tyr Lys  
305 310 315 320

Thr Arg Cys Leu Phe Ile Gln Met Glu Phe Cys Asp Lys Gly Thr Leu  
325 330 335

Glu Gln Trp Met Arg Asn Arg Asn Gln Ser Lys Val Asp Lys Ala Leu  
340 345 350

Ile Leu Asp Leu Tyr Glu Gln Ile Val Thr Gly Val Glu Tyr Ile His  
355 360 365

Ser Lys Gly Leu Ile His Arg Asp Leu Lys Pro Gly Asn Ile Phe Leu  
370 375 380

Val Asp Glu Arg His Ile Lys Ile Gly Asp Phe Gly Leu Ala Thr Ala  
385 390 395 400

Leu Glu Asn Asp Gly Lys Ser Arg Thr Arg Arg Thr Gly Thr Leu Gln  
405 410 415

Tyr Met Ser Pro Glu Gln Leu Phe Leu Lys His Tyr Gly Lys Glu Val  
420 425 430

Asp Ile Phe Ala Leu Gly Leu Ile Leu Ala Glu Leu Leu His Thr Cys  
435 440 445

Phe Thr Glu Ser Glu Lys Ile Lys Phe Phe Glu Ser Leu Arg Lys Gly  
450 455 460

Asp Phe Ser Asn Asp Ile Phe Asp Asn Lys Glu Lys Ser Leu Leu Lys  
465 470 475 480

Lys Leu Leu Ser Glu Lys Pro Lys Asp Arg Pro Glu Thr Ser Glu Ile  
485 490 495

Leu Lys Thr Leu Ala Glu Trp Arg Asn Ile Ser Glu Lys Lys Lys Arg

Asn Thr Cys  
515

<210> 4  
<211> 2380  
<212> DNA  
<213> Mus musculus

<400> 4  
accggccagg cccggacttc catgggcagc agcagcggca gggaacggag ggcgaataga 60  
  
tttcagagcc tgcacctgaa gtacaattcg aatcctgctc cagggagcga gccactgtcc 120  
  
ggatccagaa actttggcca ctgggaggaa aaatggccag tgatacccca ggtttctaca 180  
  
tggacaaact taataaatac cgccagatgc acggagtagc cattacgtat aaagaactta 240  
  
gtacttcggg acctccacat gacagaaggt ttacatttca agttttaata gatgagaagg 300  
  
aatttccaga agccaaaggt aaatcaaagc aggaggcaag aaacgctgca gccaaattag 360  
  
ctgttgatat acttgataac gaaaacaagg tggattgtca cacgagtgca tctgagcaag 420  
  
gcttgcccta tggtaactac ataggccttg tcaatagctt tgcccagaag aaaaagctgt 480  
  
ctgtaaatta tgaacagtgt gagcccaact ctgagttgcc tcaaagattt atttgtaaat 540  
  
gcaaaattgg gcagacgatg tatggtactg gttcaggtgt caccaaacag gaggcaaagc 600  
  
agttggctgc gaaagaagcc tatcagaagc tgtaaagag cccgccgaaa actgccggaa 660  
  
catcctctag cgttgtcaca tctacattca gtggcttttc cagcagctcg tctatgacaa 720  
  
gtaatggtgt ttcccagtca gcacctggaa gtttttcctc agagaacgtg tttacgaacg 780  
  
gtctcggaga aaataaaagg aaatcaggag taaaagtatc ccctgatgat gtgcaaagaa 840  
  
ataaatatac cttggacgcc aggtttaaca gcgattttga agacatagaa gaaattggct 900  
  
taggtggatt tgggtcaagtt ttcaaagcga aacacagaat tgatggaaag agatacgcta 960  
  
ttaagcgctg taaatataac acggagaagg cggagcacga agtacaagcg ctggcagaac 1020  
  
tcaatcacgt caacattgtc caataccata gttgttggga gggagttgac tatgatcctg 1080  
  
agcacagcat gagtgatata agtcgatata aaacccggtg cctctttatt caaatggaat 1140  
  
tctgtgataa aggaactttg gagcaatgga tgagaaacag aaatcagagt aaagtggaca 1200  
  
aagctttgat tttggactta tatgaacaaa tcgtgaccgg agtggagtat atacactcga 1260  
  
aagggttaat tcacagagat cttaagccag gtaatatatt tttagtagat gaaagacaca 1320

ttaagatcgg agacttttggc cttgcaacag ccctggaaaa tgatggaaaa tcccgaacaa	1380
ggagaacagg aactcttcaa tatatgagtc cagaacagtt atttttaaaag cactatggaa	1440
aagaagtgga catcttttgc ttgggcctta ttctagctga acttcttcac acgtgcttca	1500
cggagtcaga gaaaataaag tttttcgaaa gtctaagaaa aggcgacttc tctaatagata	1560
tattcgacaa caaagaaaaa agcctttctaa aaaaactact ctcaagagaaa cccaaggacc	1620
gacctgagac atctgaaatc ctgaagacct tggctgaatg gaggaacatc tcagagaaaa	1680
agaaaagaaa cacatgttag ggcttttctg agaaaacatt cctctgccgt ggttttcctt	1740
taacgatctg cagtctgagg ggagtatcag tgaatattat ccttcttttc ttaataccac	1800
tctcccagac aggttttggg tagggtgacc cacagacatt gtatttatta ggctatgaaa	1860
aagtatgcc atttctcaa ttgttaattg ctgggcctgt ggctggctag ctagccaaat	1920
atgtaaatac ttgtttctcg tctgccccaa gagaaaggca ggctcctgtg tgggaagtca	1980
cagagcccc aaagccaact ggatgaggaa ggactctggc ttttggcata aaaaagagct	2040
ggtagtcaga gctggggcag aaggtcctgc agacagacag acagacagac agacagacag	2100
agacacaaaag acatggacta gaatggagga gggagggagg aaggaggagg gggagagaga	2160
gagagagaaa gaaagagaga gagaccacat ggagagacaa aatggcttaa gttagctggg	2220
ctaactgaga gactgtccca gaaaacaggc caacaacctt cttatgcta tatagatgtc	2280
tcagtgtctt tatcattaaa caccaagcag gactgctaaa aactctgcaa tagggttttt	2340
ttttctgtt acttcaaaag caaaaaaaaa aaaaaaaaaa	2380